

**§ 431.154**

**10 CFR Ch. II (1–1–11 Edition)**

(1) Has a clothes container compartment that—

- (i) For horizontal-axis clothes washers, is not more than 3.5 cubic feet; and
- (ii) For vertical-axis clothes washers, is not more than 4.0 cubic feet; and

(2) Is designed for use in—

- (i) Applications in which the occupants of more than one household will be using the clothes washer, such as multi-family housing common areas and coin laundries; or
- (ii) Other commercial applications.

**TEST PROCEDURES**

**§ 431.154 Test procedures.**

The test procedures for residential clothes washers in Appendix J1 to subpart B of part 430 of this title shall be used to test commercial clothes washers.

**ENERGY CONSERVATION STANDARDS**

**§ 431.156 Energy and water conservation standards and effective dates.**

Each CCW manufactured on or after January 8, 2013, shall have a modified energy factor no less than and a water factor no greater than:

Equipment class	Modified energy factor, cu. ft./kWh/cycle	Water factor, gal./cu. ft./cycle
Top-Loading .....	1.60	8.5
Front-Loading .....	2.00	5.5

[75 FR 1177, Jan. 8, 2010]

**Subpart J—Provisions for Commercial Heating, Ventilating, Air-Conditioning and Water Heating Products**

SOURCE: 75 FR 667, Jan. 5, 2010, unless otherwise noted.

**§ 431.171 Purpose and scope. [Reserved]**

**§ 431.172 Definitions.**

The following definitions apply for purposes of subparts D through G, J through K and subpart T of this part. Other terms in these subparts shall be defined elsewhere in the Part and, if not defined in this part, shall have the meaning set forth in section 340 of the Act.

*Alternate efficiency determination method or AEDM* means a method of calculating the efficiency of a commercial HVAC and WH product, in terms of the descriptor used in or under section 342(a) of the Act to state the energy conservation standard for that product.

*Basic model* means, with respect to a commercial HVAC & WH product, all units of such product, manufactured by one manufacturer, which have the same primary energy source and which do not have any differing electrical, physical, or functional characteristics that affect energy consumption.

*Commercial HVAC & WH product* means any small or large commercial package air-conditioning and heating equipment, packaged terminal air conditioner, packaged terminal heat pump, commercial packaged boiler, hot water supply boiler, commercial warm air furnace, instantaneous water heater, storage water heater, or unfired hot water storage tank.

*Flue loss* means the sum of the sensible heat and latent heat above room temperature of the flue gases leaving the appliance.

*Industrial equipment* means an article of equipment, regardless of whether it is in fact distributed in commerce for industrial or commercial use, of a type which:

- (1) In operation consumes, or is designed to consume energy;
- (2) To any significant extent, is distributed in commerce for industrial or commercial use; and
- (3) Is not a “covered product” as defined in Section 321(2) of EPCA, 42 U.S.C. 6291(2), other than a component of a covered product with respect to which there is in effect a determination under Section 341(c) of EPCA, 42 U.S.C. 6312(c).

*Private labeler* means, with respect to a commercial HVAC & WH product, an owner of a brand or trademark on the label of a product which bears a private label. A commercial HVAC & WH product bears a private label if:

- (1) Such product (or its container) is labeled with the brand or trademark of a person other than a manufacturer of such product;
- (2) The person with whose brand or trademark such product (or container)

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is labeled has authorized or caused such product to be so labeled; and

(3) The brand or trademark of a manufacturer of such product does not appear on such label.

[75 FR 4474, Jan. 28, 2010]

### §431.173 Requirements applicable to all manufacturers.

(a) *General.* A manufacturer of a HVAC and WH product may not distribute any basic model of such equipment in commerce unless the manufacturer has determined the efficiency of the basic model either from testing of the basic model or from application of an alternative efficiency determination method (AEDM) to the basic model, in accordance with the requirements of this section. In instances where a manufacturer has tested that basic model to validate an AEDM, the efficiency of that basic model must be determined and rated according to results from actual testing. (For purposes of this subpart, the “efficiency” of a commercial HVAC and WH product means the energy efficiency or energy use of that product, expressed in terms of the descriptor that referenced in section 342(a) of the Act to state the energy conservation standard for that product.)

(b) *Testing.* If a manufacturer tests a basic model pursuant to this section to determine its efficiency, the manufacturer must:

(1) Select at random the unit(s) to be tested, which must be representative of the basic model,

(2) Perform the testing in accordance with the applicable Department of Energy test procedure,

(3) Meet industry standards for the measurement accuracy of testing for the equipment being tested. This includes accuracy requirements in applicable test procedures, accuracy achieved by laboratory-grade equipment, and the accuracy of calibration standards, and

(4) Meet the requirements of either §431.174(b) or §431.175(a), whichever is applicable.

(c) *Alternative efficiency determination methods—(1) Criteria an AEDM must satisfy.* You may not apply an AEDM to a basic model to determine its efficiency pursuant to this subpart unless:

(i) The AEDM is derived from a mathematical model that represents the energy consumption characteristics of the basic model; and

(ii) The AEDM is based on engineering or statistical analysis, computer simulation or modeling, or other analytic evaluation of performance data.

(2) *Subsequent verification of an AEDM.* If you have used an AEDM pursuant to this subpart,

(i) You must have available for inspection by the Department records showing:

(A) The method or methods used;

(B) The mathematical model, the engineering or statistical analysis, computer simulation or modeling, and other analytic evaluation of performance data on which the AEDM is based;

(C) Complete test data, product information, and related information that you generated or acquired under paragraph (c)(1) of this section and §§431.174(c) or 431.(b)(1), as applicable; and

(D) The calculations used to determine the average efficiency and energy consumption of each basic model to which an AEDM was applied.

(ii) If requested by the Department, you must perform at least one of the following:

(A) Conduct simulations to predict the performance of particular basic models of the commercial HVAC and WH product;

(B) Provide analyses of previous simulations conducted by you;

(C) Conduct sample testing of basic models selected by the Department; or

(D) Conduct a combination of these.

(3) *Limitation on use of an AEDM.* A manufacturer may not knowingly use an AEDM to overrate the efficiency of a basic model.

### §431.174 Additional requirements applicable to Voluntary Independent Certification Program participants.

(a) *Description of Voluntary Independent Certification Program participant.* For purposes of this subpart, a manufacturer that participates in a Voluntary Independent Certification Program (VACP) approved by the Department for a commercial HVAC and WH product, as described in §431.176,